

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of determining a predictive model for discourse functions comprising the steps of:

determining a training corpus of speech utterances;

determining ~~at least one discourse function~~ discourse functions associated with ~~[[the]]~~ speech utterances in the training corpus, the discourse functions being determined automatically based on a theory of discourse analysis;

determining prosodic features associated with the speech utterances in the training corpus; and

determining a predictive model of discourse functions by associating the prosodic features determined from the speech utterances in the training corpus with the discourse ~~function~~ functions determined from the speech utterances in the training corpus,

wherein the predictive model of discourse functions is operable to predict from prosodic features of a specific recognized speech, a likelihood that ~~[[a]]~~ speech utterances of the specific recognized speech ~~reflects~~ reflect a specific discourse function, and

wherein the predictive model of discourse functions is operable to predict a likelihood of a first portion of a speech utterance being associated with a command directed at an application and a second portion of the speech utterance being associated with content being provided to the application.

2. (Canceled)

3. (Currently Amended) The method of claim [[2]] 1, in which the theory of discourse analysis is at least one of: the Linguistic Discourse Model, the Unified Linguistic Discourse Model, Rhetorical Structure Theory, Discourse Structure Theory and Structured Discourse Representation Theory.

4. (Original) The method of claim 1, in which the predictive models are determined based on at least one of: machine learning, rules.

5. (Original) The method of claim 4, in which the machine learning based predictive models are determined based on at least one of: statistics, decision trees, Naïve Bayes.

6. (Original) The method of claim 1, in which the prosodic features occur in at least one of a location: preceding, within and following the associated discourse function.

7. (Original) The method of claim 1, in which the prosodic features are encoded within a prosodic feature vector.

8. (Original) The method of claim 7, in which the prosodic feature vector is a multimodal feature vector.

9. (Original) The method of claim 1, in which the discourse function is an intra-sentential discourse function.

10. (Original) The method of claim 1, in which the discourse function is an inter-sentential discourse function.

11. (Currently Amended) A system for determining predictive discourse function models comprising:

an input/output circuit for retrieving a training corpus of speech utterances; and
a processor for:

determining prosodic features associated with [[the]] speech utterances in the training corpus,

determining ~~at least one discourse function~~ discourse functions associated with the speech utterances in the training corpus, the discourse functions being determined automatically based on a theory of discourse analysis, and

determining a predictive model for discourse functions by associating the prosodic features determined from the speech utterances in the training corpus with the discourse ~~function~~ functions determined from the speech utterances in the training corpus,

wherein the predictive model of discourse functions is operable to predict from prosodic features of a specific recognized speech, a likelihood that [[a]] speech utterances of the specific recognized speech ~~reflects~~ reflect a specific discourse function, and

wherein the predictive model of discourse functions is operable to predict a likelihood of a first portion of a speech utterance being associated with a command directed at an application and a second portion of the speech utterance being associated with content being provided to the application.

12. (Canceled)

13. (Currently Amended) The system of claim [[12]] 11, in which the theory of discourse analysis is at least one of: the Linguistic Discourse Model, the Unified Linguistic Discourse Model, Rhetorical Structure Theory, Discourse Structure Theory and Structured Discourse Representation Theory.

14. (Original) The system of claim 11, in which the predictive models are determined based on at least one of: machine learning, rules.

15. (Original) The system of claim 14, in which the machine learning based predictive models are determined based on at least one of: statistics, decision trees, Naïve Bayes.

16. (Original) The system of claim 11, in which the prosodic features occur in at least one of a location: preceding, within and following the associated discourse function.

17. (Original) The system of claim 11, in which the prosodic features are encoded within a prosodic feature vector.

18. (Original) The system of claim 17, in which the prosodic feature vector is a multimodal feature vector.

19. (Original) The system of claim 11, in which the discourse function is an intra-sentential discourse function.

20. (Original) The system of claim 11, in which the discourse function is an inter-sentential discourse function.

21. (Currently Amended) An apparatus operable to generate a carrier wave encoded to transmit a control program, useable to program a computer to determine a predictive model for discourse functions, to a device for executing the program, the control program comprising instructions for:

determining prosodic features associated with [[the]] speech utterances in a training corpus of speech utterances,

determining ~~at least one~~ discourse function functions associated with the speech utterances in the training corpus of speech utterances, the discourse functions being determined automatically based on a theory of discourse analysis, and

determining a predictive model for discourse functions by associating the prosodic features with the discourse ~~function~~ functions,

wherein the predictive model of discourse functions is operable to predict from prosodic features of a specific recognized speech, a likelihood that [[a]] speech utterances of the specific recognized speech ~~reflects~~ reflect a specific discourse function, and

wherein the predictive model of discourse functions is operable to predict a likelihood of a first portion of a speech utterance being associated with a command directed at an application and a second portion of the speech utterance being associated with content being provided to the application.

22. (Currently Amended) Computer readable storage medium comprising: computer readable program code embodied on the computer readable storage medium, the computer readable program code usable to program a computer to determine a predictive model for discourse functions comprising the steps of:

determining a training corpus of speech utterances;

determining ~~at least one~~ discourse ~~function~~ functions associated with [[the]] speech utterances in the training corpus of speech utterances, the discourse functions being determined automatically based on a theory of discourse analysis;

determining prosodic features associated with the speech utterances in the training corpus of speech utterances;

~~determining prosodic features associated with the at least one discourse function;~~ and

determining at least one predictive model of discourse functions by associating the prosodic features with the discourse functions,

wherein the predictive model of discourse functions is operable to predict from prosodic features of a specific recognized speech, a likelihood that [[a]] speech utterances of the specific recognized speech ~~reflects~~ reflect a specific discourse function, and

wherein the predictive model of discourse functions is operable to predict a likelihood of a first portion of a speech utterance being associated with a command directed at an application and a second portion of the speech utterance being associated with content being provided to the application.